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LOGINID:ssptasmr1614

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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced
NEWS 33	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment

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 NEWS 35  JAN 28  MEDLINE and LMEDLINE reloaded with enhancements
 NEWS 36  FEB 08  STN Express, Version 8.3, now available
 NEWS 37  FEB 20  PCI now available as a replacement to DPCI


 NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:00:39 ON 20 FEB 2008

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 16:00:48 ON 20 FEB 2008
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   19 FEB 2008  HIGHEST RN 1004621-14-0
DICTIONARY FILE UPDATES:  19 FEB 2008  HIGHEST RN 1004621-14-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end


=> screen 963 AND 1006
```

```
L1    SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\1055182\stucture 1.str

L2      STRUCTURE UPLOADED

=> que L2 AND L1

L3   QUE L2 AND L1

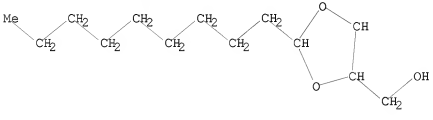
=> s l2
SAMPLE SEARCH INITIATED 16:01:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1553 TO ITERATE

100.0% PROCESSED     1553 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        28696 TO    33424
PROJECTED ANSWERS:               0 TO        0

L4            0 SEA SSS SAM L2

=> d l2
L2 HAS NO ANSWERS
L2              STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> s l2 fam sam
SAMPLE SEARCH INITIATED 16:02:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      139 TO ITERATE

100.0% PROCESSED      139 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         2073 TO     3487
PROJECTED ANSWERS:               0 TO        0

L5            0 SEA FAM SAM L2

=> s l2 fam full
FULL SEARCH INITIATED 16:02:42 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     2695 TO ITERATE
```

```
100.0% PROCESSED     2695 ITERATIONS                          3 ANSWERS
SEARCH TIME: 00.00.01

L6             3 SEA FAM FUL L2

=> d l6 1-3 ibib ab
'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'AB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual
fields or predefined formats.  The predefined substance formats
are:  (RN = CAS Registry Number)

REG    - RN
SAM    - Index Name, MF, and structure - no RN
FIDE   - All substance data, except sequence data
IDE    - FIDE, but only 50 names
SQIDE  - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD    - Protein sequence data, includes RN
SQD3   - Same as SQD, but 3-letter amino acid codes are used
SQN    - Protein sequence name information, includes RN

CALC   - Table of calculated properties
EPROP  - Table of experimental properties
PROP   - EPROP and CALC

Any CA File format may be combined with any substance format to
obtain CA references citing the substance.  The substance formats
must be cited first.  The CA File predefined formats are:

ABS  -- Abstract
APPS -- Application and Priority Information
BIB  -- CA Accession Number, plus Bibliographic Data
CAN  -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND  -- Index Data
IPC  -- International Patent Classification
PATS -- PI, SO
STD  -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when
it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented,
with text labels.

For additional information, please consult the following help
messages:
```

```
HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):ibib ab
'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'AB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual
fields or predefined formats.  The predefined substance formats
are:  (RN = CAS Registry Number)

REG    - RN
SAM    - Index Name, MF, and structure - no RN
FIDE   - All substance data, except sequence data
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SQIDE  - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD    - Protein sequence data, includes RN
SQD3   - Same as SQD, but 3-letter amino acid codes are used
SQN    - Protein sequence name information, includes RN

CALC   - Table of calculated properties
EPROP  - Table of experimental properties
PROP   - EPROP and CALC

Any CA File format may be combined with any substance format to
obtain CA references citing the substance.  The substance formats
must be cited first.  The CA File predefined formats are:

ABS  -- Abstract
APPS -- Application and Priority Information
BIB  -- CA Accession Number, plus Bibliographic Data
CAN  -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
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IPC  -- International Patent Classification
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STD  -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when
it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented,
with text labels.

For additional information, please consult the following help
messages:

HELP DFIELDS -- To see a complete list of individual display fields.
```

```
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):end

=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   71.95      72.16

FILE 'CAPLUS' ENTERED AT 16:03:48 ON 20 FEB 2008
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FILE COVERS 1907 - 20 Feb 2008  VOL 148 ISS 8
FILE LAST UPDATED: 19 Feb 2008  (20080219/ED)

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=> s l2
   REGlstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




SAMPLE SEARCH INITIATED 16:03:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1553 TO ITERATE

100.0% PROCESSED     1553 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        28696 TO    33424
PROJECTED ANSWERS:               0 TO        0

L7            0 SEA SSS SAM L2



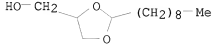
L8           0 L7

=>  d scan
L8 HAS NO ANSWERS
```

```
=> d scan 16
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y



L6   3 ANSWERS   REGISTRY  COPYRIGHT 2008 ACS on STN
IN   1,3-Dioxolane-4-methanol, 2-nonyl-
MF   C13 H26 O3
```

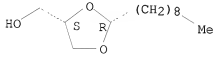



```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L6   3 ANSWERS   REGISTRY  COPYRIGHT 2008 ACS on STN
IN   1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4S)-rel-
MF   C13 H26 O3

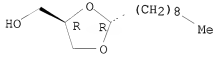
Relative stereochemistry.
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


L6   3 ANSWERS   REGISTRY  COPYRIGHT 2008 ACS on STN
IN   1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4R)-rel-
MF   C13 H26 O3

Relative stereochemistry.
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


ALL ANSWERS HAVE BEEN SCANNED


=> file caplus
```

COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.48 | 74.52

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FILE COVERS 1907 - 20 Feb 2008 VOL 148 ISS 8
FILE LAST UPDATED: 19 Feb 2008 (20080219/ED)

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=> s 16
L9 13 L6

=> d l9 1-13 ibib ab

L9 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:841740 CAPLUS
DOCUMENT NUMBER: 141:320106
TITLE: Use of cyclic acetals and ketals for improved penetration of drugs through cell and organ barriers
INVENTOR(S): Harder, Achim; Heep, Iris; Herrmann, Stefan; Grunkemeyer, Jeffry-Lynn; Kalbe, Jochen; Mehlhorn, Heinz; Schmidt, Juergen; Schmahl, Guenther
PATENT ASSIGNEE(S): Bayer HealthCare AG, Germany
SOURCE: Ger. Offen., 21 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10314976	A1	20041014	DE 2003-10314976	20030402
CA 2520919	A1	20041014	CA 2004-2520919	20040325
WO 2004087117	A2	20041014	WO 2004-EP3155	20040325
WO 2004087117	A3	20050210		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1613354 A2 20060111 EP 2004-723211 20040325

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

US 2007270503 A1 20071122 US 2007-551882 20070115

PRIORITY APPLN. INFO.: DE 2003-10314976 A 20030402

WO 2004-EP3155 W 20040325

OTHER SOURCE(S): MARPAT 141:320106

AB The invention concerns the use of cyclic acetals and ketals for improved penetration of drugs through cell and organ barriers, e.g. blood-brain barrier and placenta barrier. Thus a solution was prepared that contained (g): mebendazole 0.75; 2-nonyl-4-methanol-1,3-dioxalane and 2-nonyl-5-hydroxy-1,3-dioxane at a ratio of 9:1 3.73; N-methylpyrrolidone to 100.

L9 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:835474 CAPLUS

DOCUMENT NUMBER: 134:297503

TITLE: Preparation of degradable sulfonate surfactants

AUTHOR(S): Zhu, Hong-jun; Wang, Jin-tang; Xu, Feng; Kong, Ai-wu

CORPORATE SOURCE: Department of Allied Chemistry, Nanjing University of Chemical Technology, Nanjing, 210009, Peop. Rep. China

SOURCE: Jingxi Huagong (2000), 17(10), 559-561, 566

CODEN: JIHUFJ; ISSN: 1003-5214

PUBLISHER: Jingxi Huagong Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A series of degradable sulfonate surfactants(III) {sodium 3-[(2-heptyl-1,3-dioxolan-4-yl) methoxy]-1-propanesulfonate; sodium 3-[(2-nonyl-1,3-dioxolan-4-yl) methoxy]-1-propanesulfonate; sodium 3-[(undecyl-1,3-dioxolan-4-yl) methoxy]-1-propanesulfonate} with 1,3-dioxolane ring were prepared by three steps. (a) a series of acetals (I) were prepared by reaction of aldehydes and tri-Et orthoformate at 8-10° under the catalysis of ammonium nitrate (50% yield), (b) the cyclic glycerol acetals(II) were prepared by transacetalation of I with glycerol at 110° (80% yield), (c) then the intermediates II reacted with inner ester of 3-hydroxypropanesulfonic acid and sodium hydroxide at 60-65° for 8 h to give III (90% yield). The structure identification was performed using elementary anal., IR and 1HNMR.

L9 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:450274 CAPLUS

DOCUMENT NUMBER: 131:73660

TITLE: Preparation of long-chain cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes

INVENTOR(S): Piasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlewska, Urszula

PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.

SOURCE: Pol., 4 pp.

CODEN: POXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PL 175837 B1 19990226 PL 1994-306515 19941223
PRIORITY APPLN. INFO.: PL 1994-306515 19941223
OTHER SOURCE(S): CASREACT 131:73660; MARPAT 131:73660
AB Diastereoisomers of cyclic glycerol acetals (I; n = 7-13) and their trans-isomers (II), intermediates for the manufacture of surfactants, were prepared by transacetalization of 4-component mixts. of 2 diastereoisomer pairs comprising I, II, cis-2-alkyl-4-hydroxymethyl-1,3-dioxolane (III) and its trans-isomer IV, preferably in hexane/C6H6 mixts., in the presence of p-MeC6H4SO3H catalyst. I and II crystallize together from the reaction mixture and are separated by fractional distillation For example, a solution containing 0.0565 kg of a mixture comprising cis-2-nonyl-5-hydroxy-1,3-dioxane (V) 33, trans-2-nonyl-5-hydroxy-1,3-dioxane (VI) 23, cis-2-nonyl-4-hydroxymethyl-1,3-dioxolane 25 and trans-2-nonyl-4-hydroxymethyl-1,3-dioxolane 19% and 3 × 10-4 kg p-MeC6H4SO3H·H2O in 0.050 dm3 of 80:20 hexane/C6H6 mixture was kept for 2 days at ambient temperature and 5 days at 278 °K to give 0.0352 kg crystals which were separated by filtration, dried a distilled to give V (b. 442 °K/1.33 kPa; m. 320-320.5 °K) and VI (b. 461 °K/1/33 kPa; m. 335-336°).

L9 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:557417 CAPLUS
DOCUMENT NUMBER: 129:289335
TITLE: Mass spectrometry of the acetal derivatives of selected generally recognized as safe listed aldehydes with ethanol, 1,2-propylene glycol and glycerol
AUTHOR(S): Woelfel, Keith; Hartman, Thomas G.
CORPORATE SOURCE: M and M Mars, Hackettstown, NJ, 07840, USA
SOURCE: ACS Symposium Series (1998), 705(Flavor Analysis), 193-210
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The FEMA-GRAS list offers flavor chemists a repertoire of nearly 2000 chems. for use in compounding natural and synthetic flavors for the U.S. marketplace. Aldehydes constitute an important class of these potential flavorants and are widely utilized to impart specific nuances. Alcs. such as ethanol, 1,2-propylene glycol and glycerol are commonly employed as solvents in compounded flavor systems due to their low odor and miscibility in a wide range of aqueous and organic matrixes. However, alcs. and aldehydes react rapidly under anhydrous conditions to form acetal derivs. which often possess different sensory properties. This well known reaction is reversible and its equilibrium is influenced by time, temperature, pH and moisture content. Mass spectra of acetals are currently under represented in com. databases and few literature refs. are available. Our investigation involved a systematic mass spectrometric study of the acetal derivs. of selected GRAS aldehydes reacted with ethanol, 1,2-propylene glycol and glycerol. Aldehydes from different chemical classes representing saturated and unsatd. aliphatics, aroms., heterocyclics, terpenoids and others were included for characterization. The corresponding acetals were synthesized, analyzed by GC-MS in electron ionization mode and their retention indexes on a non-polar (polydimethylsiloxane) capillary column were determined A database of mass spectra was produced which includes many previously unreported species. In total, over 60 individual mass spectra were recorded. The characteristic mass spectral fragmentation pathways for each class of acetal are described.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

L9 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:763357 CAPLUS
DOCUMENT NUMBER: 126:117936
TITLE: Acetals and ethers. Part XXII. An efficient method for the preparation of pure long-chain cis- and trans-2-n-alkyl-5-hydroxy-1,2-dioxanes
AUTHOR(S): Piasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlewska, Urszula
CORPORATE SOURCE: Inst. Org. Polymer Technol., Technical Univ. Wroclaw, Wroclaw, 50-370, Pol.
SOURCE: Synthetic Communications (1996), 26(22), 4145-4151
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title compds., e.g., I (R = n-heptyl, n-nonyl, n-undecyl), were obtained with high yields from four-component mixts. of glycerol acetals by combining the transacetalization reaction with the crystallization process followed by fractional distillation
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:693638 CAPLUS
DOCUMENT NUMBER: 126:103649
TITLE: Polymer-supported acetals as systems for protection and controlled delivery of volatile aldehydes
AUTHOR(S): Ceita, L.; Gavina, P.; Lopez Lavernia, N.; Llopis, C.; Mestres, R.; Tortajada, A.
CORPORATE SOURCE: Departament de Quimica Organica, Universitat de Valencia, Dr. Moliner 50, Burjassot, 46100, Valencia, Spain
SOURCE: Reactive & Functional Polymers (1996), 31(3), 265-272
CODEN: RFPOF6; ISSN: 1381-5148
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polymer-supported acetals, 2-nonyl-1,3-dioxolane-4-methanol (I) and 2-nonyl-1,3-dioxolane-4-ethanol were prepared on an Merrifield resin support. Hydrolysis of I gave decanal. Decanal was also prepared by hydrolysis of polymer-supported 2-nonyl-4-phenyl-1,3-dioxolane.

L9 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:409101 CAPLUS
DOCUMENT NUMBER: 125:195472
TITLE: Carboxy dioxolanes as systems for protection and controlled release of volatile aldehydes
AUTHOR(S): Gavina, Pablo; Lavernia, Natividad Lopez; Mestres, Ramon; Munoz, Elena
CORPORATE SOURCE: Dep. Quim. Org., Univ. Valencia, Valencia, 46100, Spain
SOURCE: Journal of Chemical Research, Synopses (1996), (6), 274-275
CODEN: JRPSDC; ISSN: 0308-2342
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:195472

AB Four cyclic acetals I, II, III, and IV bearing free carboxy groups have been prepared I, III and IV do not hydrolyze in solution, but release aldehydes in a stream of moist air, while II affords a slow release of aldehyde both in solution and in contact with moist air.

L9 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:137698 CAPLUS
DOCUMENT NUMBER: 120:137698
TITLE: Synthesis and hydrolysis of chemodegradable cationic surfactants containing the 1,3-dioxolane moiety
AUTHOR(S): Wilk, Kazimiera A.; Bieniecki, Albert; Burczyk, Bogdan; Sokolowski, Adam
CORPORATE SOURCE: Inst. Org. Polym. Technol., Tech. Univ. Wroclaw, Wroclaw, 50-370, Pol.
SOURCE: Journal of the American Oil Chemists' Society (1994), 71(1), 81-5
CODEN: JAOCA7; ISSN: 0003-021X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In acid-catalyzed reactions of RCHO (R = n-C7H15, n-C9H19, n-C11H23, n-C13H27), and 7-tridecanone with 3-chloro-1,2-propane-diol, 2-alkyl- and 2,2-dihexyl-4-(chloromethyl)-1,3-dioxolanes were obtained. They were reacted with Me2NH to obtain, resp., 2-alkyl- and [(2,2-dihexyl-1,3-dioxolan-4-yl)methyl]dimethylamines, which were quaternized with MeBr to obtain the desired ammonium bromides. The structure and purity of the compds. was proved by mass spectrometry and proton NMR spectroscopy. Addnl., [(2-methyl-1,3-dioxolan-4-yl)methyl]trimethylammonium bromide and [(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]trimethylammonium bromide were synthesized as nonaggregating stds. Hydrolysis reactions of the synthesized ammonium bromides were performed by 0.1 M HCl in 50 volume% aqueous 1,4-dioxane at 50, 60, and 70°. Rate consts. of hydrolysis reactions were determined by observing carbonyl group formation at 280 nm. The hydrolytic reactivity of the studied quaternary ammonium surfactants was determined under unaggregated conditions. The length of the 2-alkyl group had a minor effect on rate constant values. The influence of various substituents at the C-4 atom of the 2-nonyl-1,3-dioxolan-4-yl derivs. on the rate consts. was also investigated.

L9 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:174943 CAPLUS
DOCUMENT NUMBER: 94:174943
ORIGINAL REFERENCE NO.: 94:28583a,28586a
TITLE: Chemical structure and surface activity. Part III. Synthesis and surface activity of ethoxylated 2-alkyl-4-hydroxymethyl-1,3-dioxolanes
AUTHOR(S): Weclas, L.; Burczyk, B.
CORPORATE SOURCE: Inst. Org. Polym. Technol., Tech. Univ. Wroclaw, Wroclaw, Pol.
SOURCE: Tenside Detergents (1981), 18(1), 19-22
CODEN: TSDTAZ; ISSN: 0040-3490
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Surfactant dioxolanes I (R = heptyl, nonyl, undecyl, tridecyl, pentadecyl, m = 7, 10) were prepared by addition of 7 and 10 mol of ethylene oxide to the corresponding II. Surface tension, wettability, foaming power, and emulsification activity were determined

L9 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:200139 CAPLUS
DOCUMENT NUMBER: 92:200139
ORIGINAL REFERENCE NO.: 92:32427a,32430a

TITLE: Chemical structure and surface activity. Part II: Synthesis and surface properties of 2-alkyl-4-hydroxymethyl-1,3-dioxolanes at the oil-water interface
AUTHOR(S): Burczyk, Bogdan; Weclas, Ludmila
CORPORATE SOURCE: Inst. Technol. Org. Tworzyw Sztucznych, Politech. Wroclawska, Wroclaw, 50-370, Pol.
SOURCE: Tenside Detergents (1980), 17(1), 21-4
CODEN: TSDTAZ; ISSN: 0040-3490
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reaction of 4-acetoxymethyl-2,2-dimethyl-1,3-dioxolane [14739-11-8] with Me(CH2)nCHO (n = 6, 8, 10, 12, or 14) in benzene containing p-MeC6H4SO3H, followed by hydrolysis, gave 64-85% yield of I (R = C7, C9, C11, C13, or C15 alkyl) (predominately trans) with the formation of ≤15% byproduct dioxane derivs. The I were more hydrophobic than the corresponding α-monoglycerides. The I adsorption at oil-water interfaces was similar to that of long-chain alcs. The ability to lower interfacial tension decreased with increasing length of the R group. The I apparently form micelles (or aggregates) in polar and nonpolar organic solvents.

L9 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1977:551590 CAPLUS
DOCUMENT NUMBER: 87:151590
ORIGINAL REFERENCE NO.: 87:23971a,23974a
TITLE: Acrolein acetals and their derivatives. (II). The structure and isomerization of glycerol acetals
AUTHOR(S): Stefanovic, Gjorgje; Petrovic, Gjorgje
CORPORATE SOURCE: Inst. Chem., Fac. Sci., Belgrade, Yugoslavia
SOURCE: Bulletin - Academie Serbe des Sciences et des Arts, Classe des Sciences Mathematiques et Naturelles: Sciences Naturelles (1976), 54(14), 53-73
CODEN: BASNA6; ISSN: 0352-5740
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reaction of RCHO (R = C6H13, n-C7H15, n-C7H19, n-C11H23) with HOCH2CH(OH)CH2OH gives mixts. of the corresponding cis- and trans-I with cis- and trans-II. The equilibrium cis-II-trans-II isomerization occurs without ring opening in a process catalyzed by hydride donors or acceptors, in which H- is abstracted from C-2. The isomerization of trans-I to cis-I follows a similar path; this reaction is irreversible as the H-bonded axial OH group in trans-I shields the C-2 carbonium ion and allows hydride abstraction to form only the cis product.

L9 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1968:48985 CAPLUS
DOCUMENT NUMBER: 68:48985
ORIGINAL REFERENCE NO.: 68:9451a,9454a
TITLE: Structure of glycerol acetals
AUTHOR(S): Stefanovic, Djordje; Petrovic, Dj.
CORPORATE SOURCE: Univ. Belgrade, Belgrade, Yugoslavia
SOURCE: Tetrahedron Letters (1967), (33), 3153-9
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Glycerol treated with successive addns. of normal aliphatic aldehydes (C7-C14); the mixture refluxed in xylene in the presence of p-MeC6H4SO3H, heated alone in the presence or absence of catalyst, or refluxed in C5H5N without catalyst; the water of formation eliminated and the products distilled in vacuo gave the following condensation products (I) (n, b.p., and

n20D given): 5 (Ia), b0.5 102-14°, 1.4502; 6, b30 183-9°, 1.4509; 7, b15 169-79°, 1.4524; 8, b15 175-85°, 1.4540; 9, b14 182-92, 1.4553; 10 (Ib), b1.0 174-86°, 1.4556; 11, b0.4 170-82° (m. 16-20°), -; 12, b0.7 199-218° (m. 18-22°), -. The separation of all 4 possible geometrical isomers of Ia and of Ib was carried out successfully by chromatog. and by distillation on a Podbielniak column. Thin layer chromatog. on silica gel, elution with 40:7:4 ligroine-Me3COH-EtOAc, and development with iodine, phosphomolybdic acid, and (or) SbCl5 showed the presence of 2 isomers (II, III) as major product when the acetals were prepared under kinetic control, whereas the isomers (IV, V) predominated when the synthesis was under thermodynamic control. The 4 acetals were separated both by gas chromatog. and column chromatog. on silica gel. The separation was effected by distillation and gave a
series of isomers I-IV from each of the glycerol acetals. Determination of the ring structure by the method of Hill, Whelen, and Hibbert (CA 22: 3132) showed that IV and V were dioxanes and II and III had dioxolane structure. The determination of the stereochemistry of the 4 isomers of Ia was carried out by
ir and N.M.R. spectral analysis.

L9 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1965:29375 CAPLUS
DOCUMENT NUMBER: 62:29375
ORIGINAL REFERENCE NO.: 62:5180h,5181a-c
TITLE: Plasmalogens. II. Formation of cyclic acetals from alkenyl glycerol ethers
AUTHOR(S): Piantadosi, Claude; Frosolono, Michael F.; Anderson, Carl E.; Hirsch, Allen F.
CORPORATE SOURCE: Univ. of North Carolina, Chapel Hill
SOURCE: Journal of Pharmaceutical Sciences (1964), 53(9), 1024-6
CODEN: JPMSAE; ISSN: 0022-3549
DOCUMENT TYPE: Journal
LANGUAGE: English

AB cf. CA 59, 11230g. The conditions necessary for the cyclization of 3-(1-alkenyloxy)-1,2-propanediols, RCH:CHOCH2CH(OH)CH2OH, (I) (loc. cit.) to the corresponding cyclic glycerol acetals (II) were investigated. I (R = hexyl) (III) (b0.02 120°, n20D 1.4657) (5 ml.) in 10 ml. 1:1 CHCl3-iso-BuOH (solvent A) heated and stirred 1 hr. with 10 ml. 10% aqueous CCl3CO2H (IV), the mixture kept .apprx. 17 hrs. at room temperature (25°) and neutralized with N NaOH, and the product isolated with Et2O gave II (R = hexyl) (V), b0.01 80°, n20D 1.4514, its structure being supported by its ir spectrum; from IV was obtained an aldehyde (octanal), whose 2,4-dinitrophenylhydrazone (DNP), m. 106°. The tabulated expts. were also carried out with III and with I (R = octyl) (VI) (b0.05 130°, n20D 1.4667) and I (R = decyl) (VII) (b0.05 165°, n20D 1.4684). I used, acid used, solvent, temperature, time (hr.), product, b.p./mm., nD/temperature; III, AcOH, none, 65°, 0.5, V, 80°/0.01, 1.4514/20°; III, 10% aqueous IV, A, 37°, 1.0 (1), V, 80°/0.01, 1.4514/20°; III, AcOH, none, 60°, 1.0 (1), V, 80°/0.01, 1.4514/20°; VI, 10% aqueous IV, A, 37°, 1.0, II (R-decyl) (VIII), 95°/0.02, 1.4526/25.6°; VI, 10% aqueous IV (2) plus 1.40 g. HgCl2, A, 37°, 1.0, VIII 95°/0.02, 1.4538/25.5°; VI, 90% AcOH, A, 37°, 1.0, VIII, 95°/0.02, 1.4540/25.0°; VI, AcOH, none, 37°, 1.0, VIII, 95°/0.02, 1.4539/25.6°; VI, AcOH, none, 50°, 1.0, VIII, 95°/0.02, 1.4541/25.0°; VI, AcOH, none, 37°, 0.5, VIII, 95°/0.02, 1.4538/25.5°; VII, AcOH, none, 60°, 1.0, II (R-decyl) (IX), 135°/0.25, 1.4570/20.0°; (1) compound isolated immediately after 1 hr.; (2)

plus 1.40 g. HgCl2; The DNP's of the aldehydes (decanal and do-decanal) obtained from VIII and IX m. 104° and 106°, resp. The synthetic II used as reference compds. were prepared according to P., et al. (CA 53, 12168e): V b0.01 80°, n20D 1.4531; VIII b0.02 95°, n20D 1.4560; IX b0.24 134°, n23D 1.4570. The ir spectra of III, VI, VII, V, VIII, and IX and synthetic V, VIII, and IX were recorded. The results support the conclusions reached by Davenport and Dawson (CA 57, 17043a) in their work with ethanolamine lysoplasmalogen (X), namely, that the cyclic acetal XI is an artifact formed by acid hydrolysis of X.

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